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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,306	07/13/2001	Cassio Brun Goldschmidt	50325-0552	6357

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EXAMINER

GOOD JOHNSON, MOTILEWA

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/905,306	GOLDSCHMIDT, CASSIO BRUN	
	Examiner	Art Unit	
	Motilewa A. Good-Johnson	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-25 and 35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-25, 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This office action is responsive to the following communications: Application, filed 07/13/2001; IDS, paper #4, filed 07/13/2001; Amendment A, filed 11/20/2003; Preliminary Amendment B, filed 04/05/2004; Amendment, filed 09/27/2004.

This action is made final.

2. Claims 1, 4-25 and 35 are pending in this application.
3. The present title of this application is "Incremental Plotting of Network Topologies and other Graphs through use of Markup Language".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 4-5, 7-9, 11-25 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Besaw, U.S. Patent Number 5,276,789, "Graphic Display of Network Topology", class 345/440, 01/04/1994, in view of Besaw, U.S. Patent Publication Number 2002/0158897, "System for Displaying Topology Map Information Through the Web", class 345/734, filed 04/30/2001.

Regarding claim 1, Besaw '789 discloses retrieving first topology information (col. 3, lines 6-7) from a data source in response to a request for a graph display, wherein the first topology information represents a first portion of a network topology that comprises graphical images that represent nodes and connection between the nodes, (col. 3, lines 12-15) retrieving second topology information from the data source, (col. 7, lines 19-30, and figure 10) wherein the second topology information represents a second portion of the network topology; (col. 7, lines 22-25, determining if there are any more networks within the internet and transferring the data from the database, and col. 1, lines 49-50, a second view as a view of portions of a network) and causing display of a graph of at least a portion of the first portion and the second portion of the topology, (col. 5, line 64 – col. 6, line 21, updating the layout of the internet graph of the news to represent clusters and vertex and connections); after causing display of the graph of the first portion of the topology, and in response to an interaction with a graphical image from the graph of the first portion of the topology, automatically retrieving second topology information from the data source, wherein the second topology information represents a second portion of the network topology . . . without retrieving again the first topology information from the data source and plotting again the graph of the first portion of the topology. (figure 10, col. 7, lines 19-30, retrieving all the networks from the database, providing three views of the network including an entire view, limited view and a segment view, therefore retrieving the entire network from a database, col. 2, lines 55-56 and updating the layouts from communication between the operating system and graphic display software, col. 5, lines 22-25)

However, it is noted that Besaw fails to disclose a method for plotting a network topology using a markup language, comprising the steps of: plotting a graph of the first portion of the topology, based on the first topology information in the markup language document causing display of the graph of the first portion of the topology on a display device; receiving the first topology information as a markup language document in response to a request for a first graphic display, wherein the markup language document is associated with a document type definition that defines how to process information in the markup language document to plot a graph based on the information;

Besaw '897 discloses a method for plotting a network topology using a markup language (paragraph 0021, figure 5, element 535, generating HTML with reference to topology map) including plotting a graph of the first portion of the topology, based on the first topology information in the markup language document causing display of the graph of the first portion of the topology on a display device; (paragraph 0017, implementing the map view module of a topology map in an object-oriented language by calling commands on an object, Examiner interprets the use of commands to generate a topology map as being capable of using any language) receiving the first topology information as a markup language document in response to a request for a first graphic display, (paragraph 0022) wherein the markup language document is associated with a document type definition that defines how to process information in the markup language document to plot a graph based on the information; (paragraph 0028)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the graphic display of a network topology disclosed in Besaw

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'789, the markup representation disclosed in Besaw '897 to allow a user to provide topology map generation information on a HTML document or a web page to prevent restriction supporting graphical data formats and provide diverse support generation.

Regarding claim 4, Besaw '789 discloses image information for specifying a graphical image representing a focus entity for plotting in the graph of a first portion of the topology, (figures 2-5 and 19)

However, Besaw '789 fails to disclose the first topology information as the markup language document.

Besaw '897 discloses the map view module configured to include icon symbols representing nodes and connection lines between the icon symbols, paragraph 0027.

Besaw '897 discloses a method for plotting a network topology using a markup language (paragraph 0021) including plotting a graph of the first portion of the topology, based on the first topology information in the markup language document causing display of the graph of the first portion of the topology on a display device; (paragraph 0017, implementing the map view module of a topology map in an object-oriented language by calling commands on an object, Examiner interprets the use of commands to generate a topology map as being capable of using any language)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the graphic display of a network topology disclosed in Besaw '789, the markup representation disclosed in Besaw '897 to allow a user to provide topology map generation information on a HTML document or a web page.

Regarding claim 5, plotting the graph of the first portion of the topology is performed according to a display arrangement in which the graphical image is substantially centered on the display device . . . (figure 19, col. 11, lines 30-59)

Regarding claim 7, Besaw '897 discloses menu information for specifying a menu to display on the display device upon a first interaction with the one or more connections; and wherein the step of receiving the first topology information is according to the markup language document. (paragraph 0031, configured to display a list, i.e. menu, of filters or filtering function that may be applied to the network topology map, which Examiner interprets as providing menu information)

Regarding claim 8, Besaw '789 discloses the step of plotting the graph of the first portion of the topology is performed according to one specified display arrangement from a plurality of available display arrangements. (col. 5, line 45- col. 6, line 40)

Regarding claim 9, Besaw '789 discloses graph information for plotting the network topology, network node information, network node connection information, plotting the network topology, and displaying the graphical image, node label information, graph information and connection information. (col. 2, lines 16-24, and col. 3, lines 6-15)

However, it is noted that Besaw fails to disclose receiving a first markup language document associated with a document type definition that defines how to process information in the markup language document to plot a graph . . .

Besaw '897 discloses a method for plotting a network topology using a markup language (paragraph 0021) including plotting a graph of the first portion of the topology,

based on the first topology information in the markup language document causing display of the graph of the first portion of the topology on a display device; (paragraph 0017, implementing the map view module of a topology map in an object-oriented language by calling commands on an object, Examiner interprets the use of commands to generate a topology map as being capable of using any language) receiving the first topology information as a markup language document in response to a request for a first graphic display, (paragraph 0022) wherein the markup language document is associated with a document type definition that defines how to process information in the markup language document to plot a graph based on the information; (paragraph 0028)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the graphic display of a network topology disclosed in Besaw '789, the markup representation disclosed in Besaw '897 to allow a user to provide topology map generation information on a HTML document or a web page.

Regarding claim 11, Besaw '789 discloses retrieving a file for displaying information about one or more network links between the first node and one or more nodes connected to the first node. (col. 2, lines 55-58)

Regarding claim 12, Besaw '789 discloses retrieving a file for displaying information about one or more routers associated with the first node. (col. 2, lines 55-58)

Regarding claim 13, Besaw '789 discloses the function initiated by the third interaction includes retrieving a file for displaying information about one or more sub

networks associated with the first node. (col. 2, lines 51-65, providing a network comprised of segments and displaying the view of the nodes connected to the segment, which Examiner interprets as a sub network)

Regarding claim 14, Besaw '789 discloses graphical image and the node label and displaying the connection are performed according to one specified display arrangement from a plurality of available display arrangements. (col. 2, lines 58-59)

Regarding claim 15, Besaw '789 discloses graphical image and the node label and displaying the connection are performed such that the graphical image is substantially centered on the display element of the display device. (col. 3, lines 40-57)

Regarding claim 16, Besaw '789 discloses displaying the graphical image and the node label is performed such that graphical image size is related to the number of connections to graphical image. (col. 11, lines 30-59)

Regarding claim 17, Besaw '789 discloses network node connection information includes connection label information for specifying a label associated with the connection and wherein the step of displaying the connection includes displaying the connection label. (figures 2-5)

Regarding claim 18, Besaw '789 discloses the connection label information includes a cost parameter label that reflects the bandwidth capacity of the network represented by the connection. (col. 14, lines 46-47, creating a bus view of a network segment, which Examiner interprets as a reflection of the bandwidth capacity of the network)

Regarding claim 19, menu information for specifying a menu to display on the display device upon an interaction with the connection; and the method further comprises the step of: enabling a function initiated by the interaction. (paragraph 0031, configured to display a list, i.e. menu, of filters or filtering function that may be applied to the network topology map and selected by a user)

Regarding claims 20 and 21, they are rejected based upon similar rational as above independent claim 1 and dependent claim 4 respectively.

Regarding claims 22 and 23, they are rejected based upon independent claim 9 and dependent claim 18 respectively. (Besaw further discloses the invention may be performed in a computer readable medium, paragraph 0039)

Regarding claim 24, it is rejected based upon similar rational as above independent claim 1. (Besaw '789 further discloses a network interface, figure 1, element 112, a memory, figure 1, element 110, and processor, figure 1, element 102)

Regarding claim 25, it is rejected based upon similar rational as above independent claim 9. (Besaw '789 further discloses a computer system display, i.e. an apparatus, for displaying the network topology, figure 1)

6. Claims 6, 10 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Besaw '789 in view of Besaw '897 as applied to claims 1 and 9 above, and further in view of Nielsen, U.S. Patent Number 5,937,417, "Tool tips on WebPages", class 715/513, 08/10/1999.

Regarding claims 6 and 10, Besaw '897 discloses click action information for specifying an action to perform upon a second interaction with the graphical image, (paragraph 0031, configured to display a list, i.e. menu, of filters or filtering function that may be applied to the network topology map) and further discloses information according to the markup language document (figure 5, element 535)

However, it is noted that Besaw '789 and '897 fail to disclose tool tip information, and wherein the step of receiving the first graph information is according to the markup language document.

Nielsen discloses implementing tool tips on web pages generated by HTML language col. 1, lines 50- col. 2, lines 21)

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the graphic display of network topology, disclosed in Besaw '789, the displaying of topology information through the web using document language as disclosed in Besaw '897 to provide topology information for display in various language dependent display configurations such as the web.

Furthermore, it would have been obvious to include tool tips, click action and menu information on the display device as disclosed in Nielsen, because tool tips allow the user to understand coded or abbreviated information in a Web Page, associated with topology maps or other helpful information.

Regarding claim 35, it is rejection based upon similar rational as claim 1, further Nielsen discloses apparatus for web page design, see abstract.

Response to Arguments

7. Applicant's arguments filed 09/27/2004 have been fully considered but they are not persuasive.

8. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., incremental plotting) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues that Besaw '789 discloses retrieving all of the topology information before proceeding with construction and plotting of a graph that represents the corresponding topology. Applicant argues that the technique disclosed in Applicant's claim 1 is incremental plotting in which only portion of the topology information necessary for plotting requested portion of the topology are retrieved in response to the request.

Besaw discloses allowing a user to retrieve various views, such as a network view or segment view and further discloses views associated with each of the network and segment view, cols. 5-6. Besaw discloses automatic layout to construct the graph and create a new segment, object or node has been received, col. 6, lines 45-67. It is therefore the interpretation of the Examiner that the inclusion of the new nodes and segments and objects generated an incremental plot of the topology and allows for the modification of the topology network.

Applicant argues that Besaw fails to disclose automatically retrieving from a data source in response to an interaction with a graphical image from the graph of the first portion of the topology. Besaw '789 discloses allowing a user to interactively move the object from an area to place on the graph; however, it is the interpretation of the Examiner that the new object received is retrieved from the source automatically.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa A. Good-Johnson whose telephone number is

(703) 305-3939. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Motilewa A. Good-Johnson
Examiner
Art Unit 2672

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